

How to Prepare Your Own
SPCC Plan:
A Step-by-Step Guide for
Tier 1 Qualified Facilities
Using the US EPA Tier I SPCC Template

County of San Diego
Certified Unified Program Agency (CUPA)
Department of Environmental Health (DEH)
Hazardous Materials Division
June 2010

Presented by
Steve Lichten
ESCI EnviroServices, Inc.
Long Beach, Calif.



Disclaimer

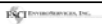
The Tier I Qualified Facility Template described in this training course and currently available on the DEH website is the US EPA's March 2010 version and incorporates all US EPA amendments and corrections to the Tier I Template from November 2006 through the November 2009 rule amendments.

This online course is not intended to substitute for provisions in statute or regulations. In the event of a conflict between the discussion in this course and any statute or regulation, the online course and template presented in the course would not be controlling. Thus, it does not impose legally binding requirements on the County of San Diego DEH, US EPA or the regulated community, and might not apply to a particular situation based upon the circumstances. The word "should" as used in the course and presented template is intended solely to recommend or suggest, in contrast to "must" or "shall" which are used when restating regulatory requirements. Any decisions regarding a particular facility will be made based on the statute and regulations. The display or mention of specific products or manufacturers is for example/illustration only and does not constitute a requirement or endorsement of any kind.

Interested parties are free to raise questions and objections about the substance of this course or template and the appropriateness of the application of the guidance presented to a particular situation. The online course and template are living documents and may be revised periodically without public notice. They will be revised, as necessary, to reflect any relevant future regulatory amendments. DEH welcomes public comments on the course content and template at any time and will consider those comments in any future revisions.



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How to Prepare Your Own
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Tier 1 Qualified Facilities
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MODULE I
Course Introduction &
SPCC/APSA Overview
(43 slides + quiz)





How to Use the On-line Modules

Tr Instructor bio and contact info

Module outline (slide titles and)

you must meet 2 below:

complete annual training

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or Minor

Slide outline

Thumbnail view

Slide notes

Word search

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How to Use the On-line Modules

Slide thumbnails

Pause slide and

Go back one

Skip ahead one slide

What's a Large Quantity Generator?

LQGs

Generate 1000 kilograms or more of waste during a month, or

One kilogram of acutely hazardous waste (P list) during a month (e.g., sodium cyanide, strychnine) or

Noted with * in Appendix A

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How to Use the On-line Modules

Slide notes (provided on some slides)
(not a script... APSA slide notes are additional reference, technical background or clarifying detail)

To make the whole presentation larger - just click and drag at the very corner (like resizing the 'window')

Container Labeling Requirements for Hazardous Waste Accumulation

Labeled or marked clearly with the words "Hazardous Waste" and

business

tion of the waste

aste (e.g.,

for inspection

On all containers and tanks

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Introduction

Module I. Course Introduction & SPCC/APSA Overview

Module II. Introduction to the Tier I Template

Module III. Facility Description, Plan Review, Amendments, Oil Storage List

- Sections I and II
- Tables G-1 and G-2
- Attachments 1.1 and 1.2

Completing the Template

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Completing the Template

Module IV. Secondary Containment, Oil Spill Control & Spill Prediction

- Tables G-3 and G-4

Module V. Inspections, Testing, Recordkeeping, Personnel Training

- Table G-5
- Attachments 3.1 and 3.4

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Completing the Template

Module VI. Security, Emergency Procedures, Contact List, Notification and Spill Reporting

- Tables G-6 through G-9
- Attachment 4

Module VII. General Rule Requirements and Course Review

- Table G-10
- Attachments 3.1, 3.2 and 3.3

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Course Objective

This course is intended specifically to assist Tier I Qualified Facilities in using the US EPA Tier I template to prepare their own SPCC plan and ensure ongoing compliance

For more information about the Aboveground Petroleum Storage Act (APSA), how APSA relates to the federal SPCC requirements, the federal SPCC rule or how the CUPA is implementing APSA, there are additional links, information and presentations on the APSA webpage of the DEH website:

http://www.sdcounty.ca.gov/deh/hazmat/hmd_apsa.html


Training presentation covering APSA and how it is being implemented in San Diego County:
http://www.sdcounty.ca.gov/deh/hazmat/pdf/hmd_apsa_and_you.pdf

Training presentation explaining how APSA relates to the SPCC Rule:
http://www.sdcounty.ca.gov/deh/hazmat/pdf/hmd_spcc_and_you.pdf

Training presentation explaining the Federal SPCC requirements:
http://www.sdcounty.ca.gov/deh/hazmat/pdf/hmd_spcc_presentation.pdf

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How to Use the Quiz tab

A short, voluntary/optional quiz at the end of each module... just to aid your understanding of the module

Which of the following violation(s) is a Class I violation?

☐ A) A violation that represents a significant threat to human health or safety or the environment.

☐ B) A hazardous waste labeling violation.

☐ C) A 55-gallon drum of hazardous waste acetone/nitrite solvent that is rolled down into a canyon and it's contents are released into the environment.


☐ D) all of the above

☐ E) only A & C

Submit Clear

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Course Instructor

Steve Lichten

President, ESCI EnviroServices, Inc; Long Beach, CA

27+ years in multi-media environmental compliance (industry & consulting) – including SPCC Plan development, implementation & auditing


including 24+ years of teaching/training experience (regulatory agency personnel training courses, university & university extension, private industry and professional development seminars)

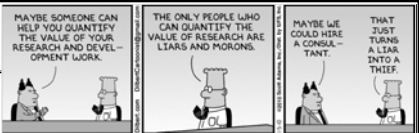
Developed & taught all 18 three-day APSA / SPCC Inspector Training classes for UPAs in 2009

APSA Steering Committee and APSA Working Group participant

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SPCC Rule and the
Calif. Aboveground Petroleum Storage Act:
A Brief Overview



Federal Oil Spill Prevention Regulations:
40 CFR 112

 **Spill Prevention, Control and Countermeasure (SPCC) Plans have been a federal requirement since 1974**





◆ Amended ~8 times since

✂ **Major amendment in 2002 clarified that the rule applies to facilities who *use and handle* oil... not just *store* oil**

◆ Also clarified that oil-filled equipment is included... not just bulk storage tanks & containers

 **Regulated facilities must prepare and implement SPCC Plans**

Compliance Dates for All Facilities


A facility starting <u>regulated</u> operation...	Must...
On or before August 16, 2002	 Maintain existing SPCC Plan  Amend and implement the SPCC Plan no later than Nov. 10, 2010
After August 16, 2002 through Nov. 10, 2010	 Prepare and implement the SPCC Plan no later than Nov. 10, 2010
After Nov. 10, 2010	 Prepare and implement a SPCC Plan before beginning regulated operations




SPCC Compliance


SPCC compliance means

1. Complying with the detailed 40 CFR 112 rule requirements
2. Writing the descriptive facility-specific SPCC Plan per the rule
3. Implementing the Plan as written
4. Assuring that the Plan is kept current and consistent with facility equipment and activities



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SPCC Rule vs SPCC Plan


Federal SPCC rule (contained in Title 40 Code of Federal Regulations (CFR) parts 112.1 - 112.8)

- ◆ Contains “performance-oriented” requirements & specifications for spill prevention in three broad areas:

- ⚙ **Engineering-based**
 - ◆ Containment, valve type, discharge controls, etc.
- ⚙ **Procedure-based**
 - ◆ Inspections, overfill prevention, containment drainage, leak correction, spill response, etc.
- ⚙ **Administrative-based**
 - ◆ Training, management review & certification, recordkeeping, etc.

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SPCC Rule vs SPCC Plan: So what’s the SPCC Plan for?

A written, facility-certified plan document


- ⚙ **Check-the-box affirmations of compliance with rule requirements**
 - For Tier I Qualified Facilities... using the SPCC Plan Template
- ⚙ **Narrative descriptions of how the facility achieves/ maintains compliance with certain specific requirements**

Mostly up to the facility to determine the appropriate, site-specific means of rule compliance


- ⚙ US EPA and the rule places faith in the management certification and determinations
- ⚙ US EPA and the rule places responsibility for accuracy & implementation on the facility

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Helpful & Handy Reference

Available for download on the DEH website

Summary Rule Requirements & Plan Components Cheat Sheets

- One summarizing the entire rule
- One summarizing/listing just the elements applicable to Tier I Qualified Facility SPCC Plans

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Summary Rule Requirements & Plan Elements (40 CFR 112)

NOTE: The rule sections not typically described or included in most SPCC Plans are §§112.1, 112.2, 112.3(a) – (c), 112.4 (unless it specifically applies or is otherwise relevant), and 112.5 (unless the facility is a qualified facility). These sections are not seen as “compliance requirements”, and therefore do not generally need to be included in an SPCC Plan.

§112.1 General applicability of the rule

- Describes equipment, oils, and facilities subject to as well as exempt from the rule
- Describes/references the criteria for harmful discharges to navigable water (112.1(b))
- Describes the purpose of SPCC Plans (112.1(e))

§112.2 Definitions

- Definitions of terms used in the rule... but some terms are defined (or clarified) in other rule sections (e.g. Tier I and II qualified facility, non-transportation related tank truck, etc.)

§112.3 Requirement to prepare an SPCC Plan

- Compliance dates/deadlines for various facility types (112.3(a) – (c))
- PE review and certification requirements (112.3(d))
- Required plan locations (112.3(e))
- Time extensions granted by US EPA RA (112.3(f))
- Self-certification requirements for qualified facilities (112.3(g))

§112.4 Amendment of SPCC Plan by RA

- Information/plan submission requirements to US EPA Regional Administrator and state/local agencies after certain discharges (112.4(a) – (c))
- Requirement to amend the SPCC Plan if required by RA (112.4(d) – (f))

§112.5 Amendment of SPCC Plan by facility owner or operator

- Required Plan amendment and implementation after changes (112.5(a))
- Required amendments specific to some oil production facilities (112.5(b) and (c))
- 5 year review and evaluation by owner/operator and follow-on amendment and implementation (112.5(d))
- Required PE certification of any technical amendments (112.5(e))

§112.6 Qualified facilities

- Specific requirements unique to Tier I qualified facilities and reference to 112.7 and 112.8 requirements applicable to Tier I qualified facilities (112.6(a))
- Specific requirements unique to Tier II qualified facilities and reference to 112.7 and 112.8 requirements applicable to Tier I qualified facilities (112.6(b))

California Aboveground Petroleum Storage Act (APSA)

- APSA has been in place since 1990
- Revised in 2007
- California Health & Safety Code Chapter 6.67
- Effective January 1, 2008, APSA requires the CUPA to administer and enforce the federal SPCC rule as it relates to:
 - Petroleum use, handling and storage at tank facilities subject to APSA
 - No impact on federal regulation by US EPA
- CUPA inspectors may ask to review SPCC plans and verify implementation during hazardous materials inspections

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Who is Subject to the SPCC Rule and APSA?

- The federal SPCC rule applies to a wide range of tanks/containers & oil-filled equipment and to all types of oils
 - Refer to 40 CFR 112.1 for the federal criteria of who is subject to the federal SPCC Rule
- Facility-wide oil storage capacity over 1,320 gallons
 - Counting tanks, containers & equipment 55 gal. capacity and greater
- And pose a risk of discharge to navigable waters
- APSA applies to your facility if:
 - Facility's total aboveground storage capacity is 1,320 gallons or more of petroleum
 - Counting tanks, containers or petroleum-containing equipment with 55 gal. or larger capacity
 - Certain tanks and equipment are excluded from APSA

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How Do You Determine If You Are Subject To APSA?

- Count/include the following if they have a capacity of 55 gallons or greater
 - All oils for federal SPCC; only liquid petroleum for APSA
- Tanks (not USTs)
- Containers
- Process, operational and manufacturing equipment
- Non-transportation related tank trucks
- For oil-filled electrical equipment:
 - Most are APSA exempt (conditional)
 - All are federally regulated




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Helpful & Handy Reference

Available for download on the DEH website



Summary Applicability Differences

Summary Applicability Differences			
APSA 40 CFR 112.3	Federal SPCC Rule 40 CFR 112	Comments	
Exempt Facility Types <ul style="list-style-type: none">FlaresSubmersesConstruction sitesLogging sites	No exemption for these types of facilities	Conditional APSA exemption from SPCC Plan implementation only	
Exempt Tank & Equipment types <ul style="list-style-type: none">Oil field production equipmentCrate oil production-related tanks (SPCC 112.3)Boilers & pressure vesselsFlow waste tanks at CTRC permitted facilitiesCPUH-regulated USTs	Completely buried USTs in compliance with all state UST requirements	Conditional APSA exemption for all field electrical equipment	
Exempt activity-related tanks and equipment	Tanks, vehicles, railcars, transport vehicles and vessels used in transportation	Same	Must be actively engaged in transportation activities
Type of oil regulated	Petroleum liquids	Any type of oil or oil product <ul style="list-style-type: none">PetroleumVegetableAnimalSynthetic	
Tank definition	"Aboveground storage tank" = tanks, containers, oil filled equipment, and new transportation-related tank trucks	Bulk containers = tanks and containers <ul style="list-style-type: none">40 CFR 112 has specific definitions for both	
Minimum tank or container capacity threshold for applicability determination or capture	55 gallon	Same	
Minimum facility aggregate capacity threshold for applicability determination or capture	1,320 gallons of liquid petroleum	1,320 gallons total of any type of oil	
Facility definition	Narrow - related to tank ownership or operational control on a single site	Broad - related to several additional factors	APSA = "tank facility" 40 CFR 112 = "facility"
Petroleum or oil-related activities captured	Containing, storing, processing, transferring, distribution, use, or consumption	Drilling, production, gathering, storing, processing, refining, transferring, distribution, use, or consumption	Though not defined in the ACT, "containment" is interpreted broadly for APSA purposes. Due to the APSA exemption for SPCC 112.3-regulated crude oil production tanks, oil production activities are not captured under APSA
Environmental threat threshold for applicability determination or capture	No environmental threat criteria	Reasonable likelihood of harmful discharge to receiving waters of US	

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Summary APSA Requirements

- Prepare and implement an SPCC Plan in accordance with the federal SPCC rule
- Periodically inspect your facility to assure compliance
 - This is an integral part of implementing your SPCC Plan
- Submit a 'Tank Facility Statement' or business plan to DEH annually
- Pay APSA permit fees to DEH annually
 - Will be based on the total shell capacity of petroleum at your facility

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What Type of APSA/SPCC Regulated Facility Are You?

The three types of SPCC/APSA tank facilities:

- Tier I Qualified Facilities**
 - Can use the US EPA SPCC Tier I Plan template to prepare their SPCC Plan & self-certify
- Tier II Qualified Facilities**
 - Prepare a 'regular'/full SPCC Plan & self certify
 - California has available an optional Tier II Plan Template
- Non-qualified facilities**
 - Prepare a 'regular'/full SPCC Plan & have a Professional Engineer review & certify

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Tier I Eligibility Criteria: Oil Capacity

Total facility-wide oil storage capacity:


- 10,000 gallons or less**
 - And temporary oil storage does count towards this total
- Must count all oils... not just petroleum**

Largest individual oil storage container (tank) capacity:

- 5,000 gallons or less**
- All oils... not just petroleum**

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Tier I Eligibility Criteria: Discharge History

For the 3 years prior to Plan certification (or since becoming subject to the rule) the facility must not have had:

- A single discharge of oil to navigable waters or adjoining shorelines exceeding 1,000 U.S. gallons, or**
- Two discharges of oil to navigable waters or adjoining shorelines each exceeding 42 U.S. gallons within any 12-month period**

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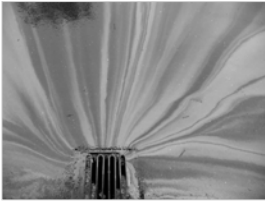
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Spills vs Navigable Water Discharges

Spills & releases to the ground



Discharges to navigable water (i.e. the storm drain)



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Loss of Tier I Qualified Facility Eligibility?

1. If facility increases single individual container oil storage capacity to more than 5,000 gal.

- Temporary storage counts!
- Then: Amend Plan template immediately to reflect current conditions ... then have a regular/full self-certified SPCC Plan (or a Calif. Tier II template) within 6 months

2. If total facility oil storage capacity increases to over 10,000 gallons:

- Then: Amend Plan template immediately...and have a regular/full PE certified Plan within 6 months

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Examples of APSA-Regulated Aboveground Storage Tanks

The SPCC Plan (and compliance program) must include all regulated, non-exempted tanks, containers, equipment, etc.

Must also include in the Plan the following (if associated with the tanks, containers, etc.):

- Petroleum handling and transfer areas
- Petroleum loading and unloading areas
- Petroleum piping

So... let's take a look at some examples

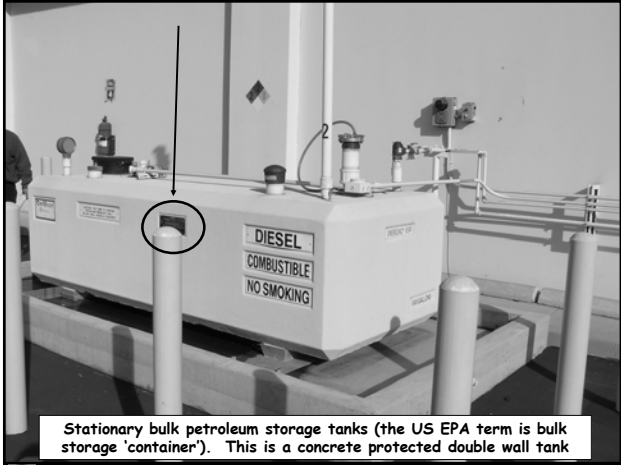
- And start to get a feel for the differences between bulk tanks/containers and oil-filled equipment
 - Because there are some different requirements for each (more info and a guidance sheet in later Modules)

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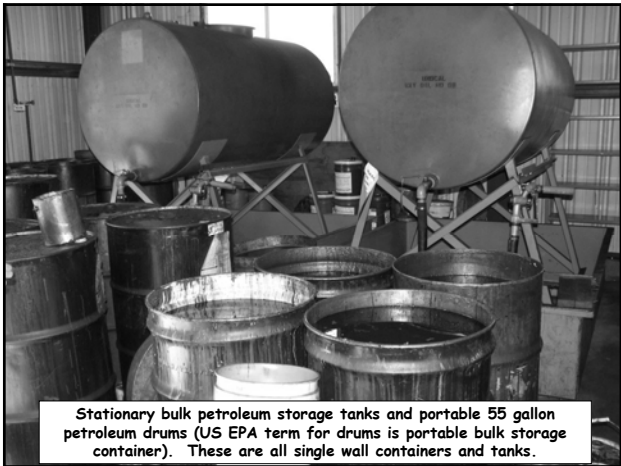
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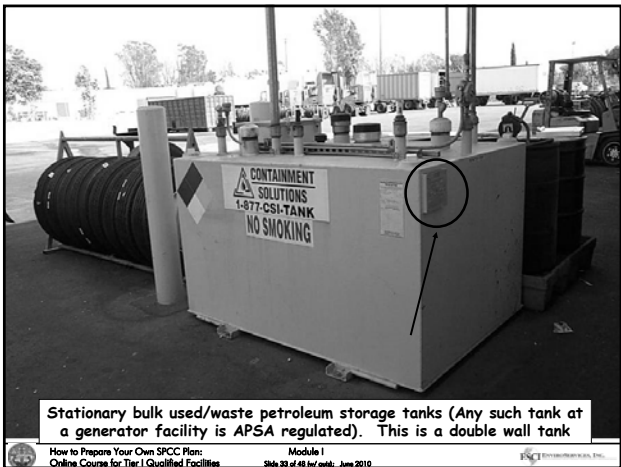




Stationary bulk petroleum storage tanks (the US EPA term is bulk storage 'container'). This is a concrete protected double wall tank



Stationary bulk petroleum storage tanks and portable 55 gallon petroleum drums (US EPA term for drums is portable bulk storage container). These are all single wall containers and tanks.



Stationary bulk used/waste petroleum storage tanks (Any such tank at a generator facility is APSA regulated). This is a double wall tank

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